



State of Wisconsin  
Governor Scott Walker

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**Department of Agriculture, Trade and Consumer Protection**  
Ben Brancel, Secretary

**DATE:** July 16, 2013

**TO:** Board of Agriculture, Trade and Consumer Protection

**FROM:** Ben Brancel, Secretary *Ben Brancel*  
Mike Powers, Administrator, Division of Agricultural Development *M. Powers*

**SUBJECT:** Division of Agricultural Development's Dairy and Processing Report

**PRESENTED BY:** Laura Paine, Economic Development Consultant  
Marty Grosse, Agricultural Program Specialist

**RECOMMENDATION:** Informational purposes only

**SUMMARY / BACKGROUND**

Within the Department of Agriculture, Trade and Consumer Protection, the Division of Agricultural Development has specialized staff that work with the dairy sector, both programmatically and in response to clientele requests, as part of our mission is help grow Wisconsin's diverse agricultural economy.

The services are focused to provide farmers, agribusinesses and organizations with technical and financial assistance and related services to improve profitability, production, quality of life and access to new markets.

Individual clientele questions and needs are addressed by Farm Center staff, Sector Development staff, and both domestic marketing (Local and Regional Foods and Market Orders) and International Trade Team staff.

All sizes and types of dairy farms in the state are served with the purpose of providing support for each individual farmer or processor to foster their business goals into the next generation of operators.

The Division works with a diverse array of clients from individual farmers and startup farmstead processors, to large processors and dairy input and equipment suppliers.

*Agriculture generates \$59 billion for Wisconsin*

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# Dairy and Processing Services Report

The Division of Agricultural Development

Serving America's Dairyland: Past, Present and Future

Milk Production and Processing Economic Impact

Wisconsin's Dairy Farms

Cows

Goat and Sheep

Business Development and Market Development Services

Dairy Farmers

Grow Wisconsin Dairy 30x20

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Networking and Referral Services

Technical Assistance

International Trade Services

Investment Tax Credit Certification

Revolving Loan Fund

Example Business and Market Development Projects

30 x 20 Dairy Profit Team

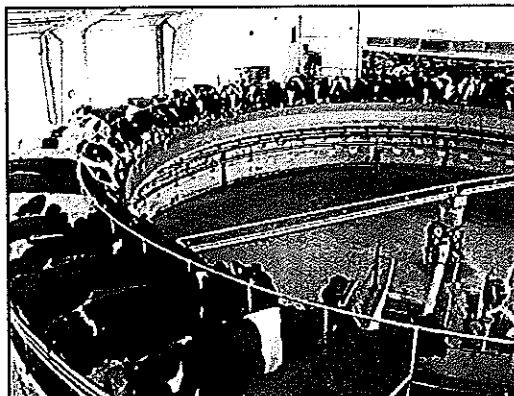
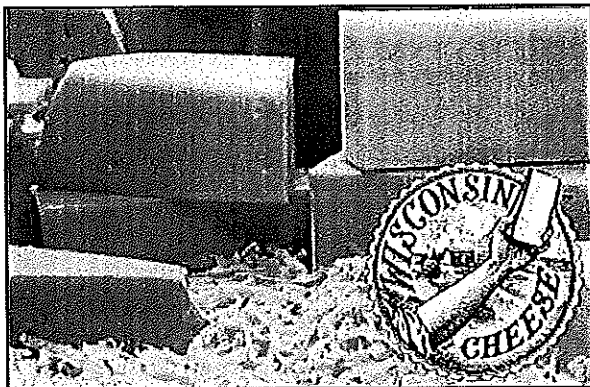
Market Development Exports Dairy

Wisconsin Whey Working Group

Clock Shadow Creamery

Pasture-Grazed Dairy Market Research

Department of Agriculture, Trade and Consumer Protection  
Division of Agricultural Development



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*Statistical Information for this report was compiled by many other organizations, including USDA, Wisconsin Agricultural Statistics (WASS), the Wisconsin Milk Marketing Board (WMMB), and others.*

*Reporting dates are identified as the most readily available and most current data, including the most recent Agricultural Census took place in 2007. Updated information is presented when available.*

*The next agricultural census has been distributed by USDA, National Agricultural Statistics Service. The date for returning surveys closed May 31, 2013.*

## *Division of Agricultural Development*

The Department of Agriculture, Trade & Consumer Protection (DATCP) is responsible for statutory, administrative services providing food safety, animal health, resource management, trade and consumer protection.



The Division of Agricultural Development contributes to the continued growth and development within the dairy industry by providing market and business development services and supporting individual businesses with technical and financial assistance and coordinating research by working with other divisions, agencies, organizations, institutions, and industry associations.

## *Serving America's Dairyland - Past, Present and Future*

Wisconsin is prominent, both nationally and internationally, in the dairy sector, producing 15% of the country's milk, 25% of the butter, and 30% of the cheese, and leading in the export of dairy products, dairy equipment, genetics, feed, and expertise<sup>1</sup>.

Wisconsin officially became "America's Dairyland" in 1940, when the slogan first appeared on license plates. Dairy farming and dairy processing have been an important part of our state's history, economy, and culture dating back to one of the first dairy processors in the state, Annie Pickett. Pickett started making cheese and butter in her home near Lake Mills in 1841 using milk from neighbors' cows. By 1869, Wisconsin was producing over 3 million pounds of cheese annually. By 1899, more than 90% of Wisconsin farmers raised dairy cows<sup>2</sup>.

During this period, William Dempster Hoard, founded the State Dairyman's Association in 1872 and began publishing Hoard's Dairyman in 1885<sup>3</sup>.

Hoard worked with early University faculty, William Henry and Stephen Babcock, advocating for high standards for the dairy industry and promotion of scientific dairying and farmer education.

As early as the 1880s, a coordinated effort to improve the quality and productivity of dairy in the state began as the University of Wisconsin was offered short courses and 'Farmers' Institutes' to share science-based information with dairy farmers.

Wisconsin's peak number of dairy farms occurred in 1920 totaling 171,348 farms.

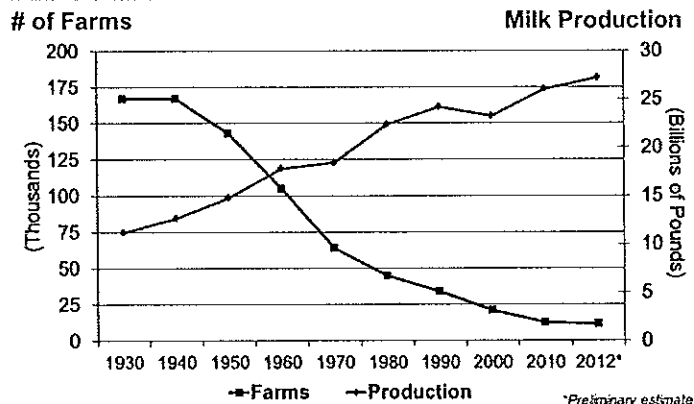
<sup>1</sup> Wisconsin Milk Marketing Board. [http://media.eatwisconsincheese.com/ag\\_media/statistics.aspx](http://media.eatwisconsincheese.com/ag_media/statistics.aspx)

<sup>2</sup> Lampard 1963. The rise of the dairy industry in Wisconsin. <http://hdl.handle.net/2027/mdp.39015013098523>.

<sup>3</sup> <http://www.wisconsinhistory.org/topics/hoard>.

The average herd size was 10 cows, production averaged 4,112 pounds per cow per year and the price of milk was \$2.55 per hundredweight. Total milk production in that year was 74 billion pounds<sup>4</sup>.

### Wisconsin Milk Production Trends Dairy Farms & Milk Production, 1930-2012\*



Wisconsin's prominence stems from deliberate, long-standing public and private efforts to build a strong dairy industry.

### Milk Production and Processing Economic Impact

Total economic activity generated by Wisconsin's dairy industry averages about \$26.5 billion annually, about 45% of Wisconsin's total agricultural

economy. About three quarters of this is from the processing sector, with the remainder coming from revenues related to dairy farming<sup>5</sup>.

Information presented by the Wisconsin Milk Marketing Board represents Wisconsin's position nationally in milk production with 13.6 percent of US production.

Dairy farming accounts for 56,473 jobs in the state, with another 115,486 jobs represented in the dairy processing industry<sup>6</sup>.

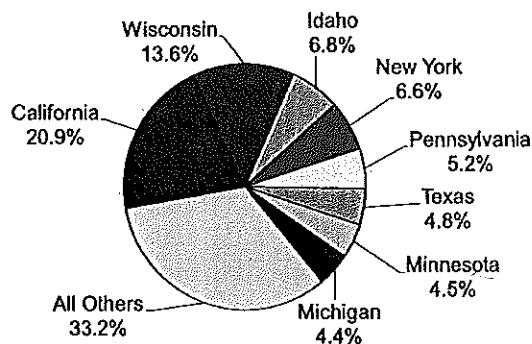
As of June 2013, dairy herd numbers in Wisconsin stand at 10,853.

Based on Wisconsin Agricultural Statistics Service calculations, average Wisconsin dairy herd size stands between 110 and 120 cows, average production per cow is approximately 21,000 pounds, and total production in 2012 was just over 27 billion pounds<sup>7</sup>.

Attributing for the combined economic impact across all value, each dairy cow represents an

### Milk Production, Top 8 States, 2012\*

Total U.S. Production = 200.3 Billion Pounds



<sup>4</sup> Census of Agriculture, National Agricultural Statistic Service: <http://www.agcensus.usda.gov/index.php>

<sup>5</sup> Deller and Williams, 2009. The Contribution of Agriculture to the Wisconsin Economy  
<http://www.uwex.edu/ces/ag/wisag/>

<sup>6</sup> Deller and Williams, 2009. The Contribution of Agriculture to the Wisconsin Economy  
<http://www.uwex.edu/ces/ag/wisag/>

<sup>7</sup> Wisconsin Agricultural Statistics Service: [http://www.nass.usda.gov/Statistics\\_by\\_State/Wisconsin/index.asp](http://www.nass.usda.gov/Statistics_by_State/Wisconsin/index.asp)

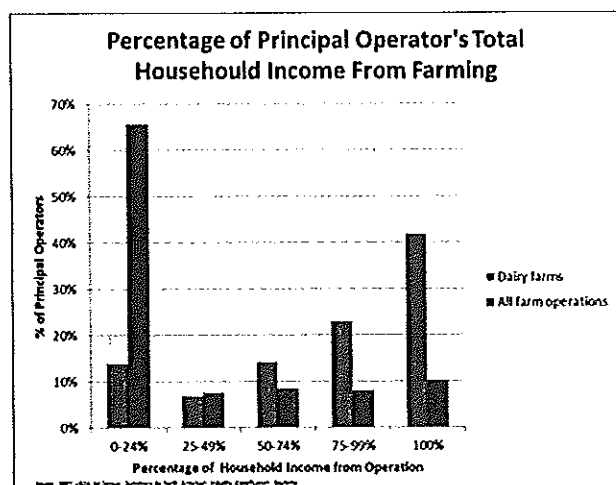
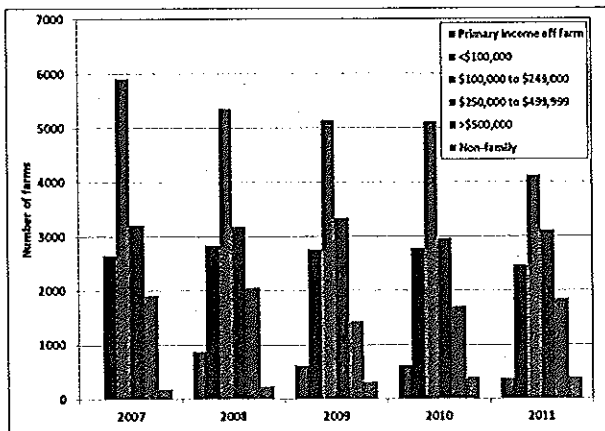


Table 1. Dairy Farmer Demographics

	Ag Census Year		
	1987	1997	2007
Total number of dairy farms	34,812	20,958	13,061
Average age	47.9	48.7	50.7
Male	97%	97%	96%
Female	3%	3%	4%
Average years on present farm	20.2	21.6	24.6
2 years or less	4%	4%	3%
3 or 4 years	5%	5%	3%
5 to 9 years	14%	11%	9%
10 years or more	67%	71%	85%
Not reported	11%	10%	na
Primary occupation is farming	95%	95%	95%
Primary occupation is non-farming	5%	5%	5%

SOURCE: USDA, Ag Census, Operators of North American Industry Classification #212 (Dairy of milk and milk production)

estimated \$21,000 in economic activity to the community where the farm is located.

### Wisconsin's Dairy Farms

**Dairy Farms.** The state continues to have a diversity of herd sizes and types of dairy farming systems, positioning the industry to adapt to economic and weather challenges and take advantage of new opportunities. Wisconsin ranks number one in the US in total number of dairy farms. More than 40% of dairy farms generate all of their household income from farming operations. The majority of Wisconsin dairies (77%) generate more than \$100,000 annually, with 40% exceeding \$250,000.

The average managerial experience for a dairy farmer in Wisconsin is 25 years. The average age of dairy farmers has remained fairly constant at 50.7 years old and is slightly lower than the average of all farmers at 57 years.

In 1987, beginning dairy farmers made up 25% of operators in 1987. Most recent data show that current estimates are approximately 15% with data from 2007.

**Goat and Sheep Dairies.** Goat and sheep dairy farming and processing are a growing industry in Wisconsin. In 2009, 180 goat and 12 sheep dairies generated more than \$11 million in revenue<sup>8</sup>. Wisconsin continues to lead the nation in numbers of dairy goats. Average flock sizes were 143 and 159, for goat and sheep dairies, respectively. While sheep and goats produce relatively small amounts of milk, pay prices are significantly higher than for cow's milk. Both goat and sheep milk is used either by itself or blended with cow's milk in specialty cheeses. Twenty four dairy plants process goat milk and 11 process sheep milk.

A large proportion of respondents to the 2009 WASS goat and sheep surveys came from individuals with non-farm backgrounds (48% for goat

<sup>8</sup> Wisconsin Agricultural Statistics Services. 2009 Goat and Sheep Dairy Production Survey.

dairies and 72% for sheep dairies). A majority of these farmers planned to expand their operations over the next five years (71% for goat dairies, 75% for sheep dairies).

Table 2. 2009 Wisconsin Goat and Sheep Dairy Characteristics				
Type	Number of flocks (2009)	Average Flock Size	Annual production per doe or ewe	Average Pay Price per cwt
Goat	180	143	1359	\$30.25
Sheep	12	159	434	\$75.30

## ***Business Development and Market Development Services***

### **Dairy Farmers**

Services are structured to support individual farmers to meet challenges to their presented goals.

Examples include: market volatility, weather, risk management, herd health, milk quality, modernization, facilities, market specialization, preparations to access capital, transition between generations.

### **Dairy Processors and Dairy Businesses**

Services are structured to support processors and associated dairy processes and other Wisconsin dairy businesses to meet challenges to their presented goals.

Examples include: procuring milk, product development, value added market opportunities, facility upgrades, new customers or markets, branding, coordinating understanding of licensing and food safety requirements, siting decisions, or preparations for access capital.

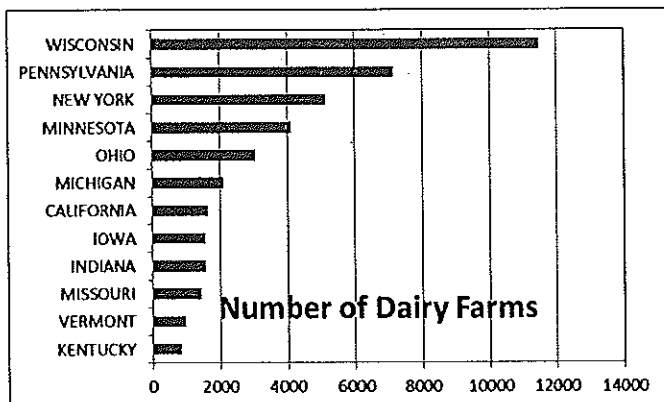
### **Dairy 30x20**

The Grow Wisconsin Dairy, 30 x 20 program goal is to improve the long-term viability of Wisconsin's dairy industry by providing assistance to dairy farmers, without regard to size or type, focusing on establishing and maintaining long-term, sustained dairy operations.



The Department relies on a multi-agency, private-public network for services and referrals. Through cost-sharing grants, loans, technical assistance, and a toll-free GrowWIDairy line, staff assist farmers with obtaining the information related to operational systems, business and legal structure, herd health, production and profitability. This includes partnering with University of Wisconsin Extension, U.W. Center for Dairy Profitability, and Wisconsin Technical Colleges, as well as engineering firms, genetics companies, attorneys, veterinarians, nutritionists, and management consultants.





Utilization of the program in 2012 was (39 cost share agreements) and 2013 (44 cost share agreements). Total number of profit teams was 17, total number of modernization projects was 54, total number of farm transfers was 12.

Examples of **Profit Team** projects that were funded include milk quality improvement, herd health protocols, employee relations/safety, and business planning. Examples of **Planning and Preparation** projects that were funded include parlor/free stall construction, pasture irrigation, management software

updates/implementation, robotic milking systems, storm water runoff, manure storage facilities, and farm transfers, including financial consulting, legal advice and document preparation, business entity formation, and business planning.

### Rural Electric Power Services Program (REPS)



The REPS program is jointly administered by DATCP and the Public Service Commission of Wisconsin (PSC). The PSC is the regulatory authority for the investor owned utilities and assists the electric utility cooperatives for potential stray voltage and power quality reports. Staff at the PSC oversee the Farmstead Rewiring Education Initiative, utilities farm rewiring programs, stray voltage testing procedures and protocol, and participate in National Electric Code and National Electric and Safety Code committees.

The Department REPS staff focus on herd performance concerns and farmer education, as well as acting as a liaison between farmers, utilities and regulators. REPS program is managed as part of the Wisconsin Farm Center, frequently the first point of contact for farmers with concerns over potential stray voltage. Team members listen to farmer's concerns and pass information along to either the PSC or the servicing utility or coop. REPS staff then either actively participate in a support role or follow up to ensure that the farmer's issues are addressed.

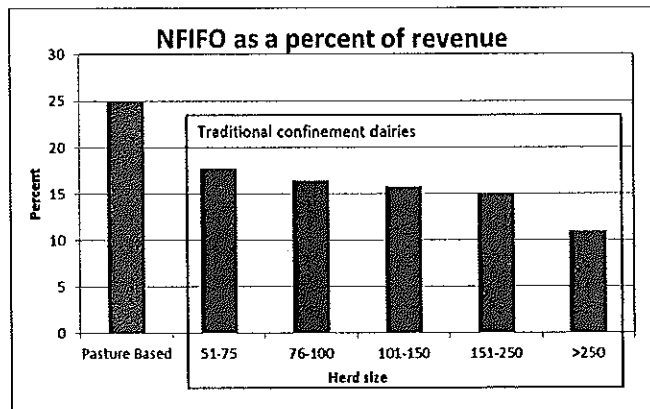
**Herd Based Diagnostics Program (HBDP)** is administered by REPS. For those who qualify, the HBDP has a veterinarian on staff who performs diagnostic testing to assist the farmer in determining the cause of herd health problems. Some of the services provided include animal health checks, diagnostic testing, and feed and milk testing.

In 2012, the Department provided in-depth assistance to 15 farms across Wisconsin. Each of these farms were faced with chronic, unresolved, and herd health problems that were successfully identified through the services and expertise offered by the REPS staff working with a network of public and private labs and veterinary experts.

## Grazing Development for Dairy

The Department offers support to dairy and livestock producers interested in incorporating managed grazing into their farm. The services are structured to meet the farmer's goal to

maximize use of high quality, productive pasture and focuses on reducing production costs to improve profitability. Services are provided by coordinating education and individual technical assistance through local grazing networks.



In 2010, approximately 22% or 3,070 Wisconsin dairy farms used managed grazing to provide the bulk of the feed for their animals<sup>9</sup>. Wisconsin has more grazing dairy farms than 46 states have total dairy farms. Pasture based dairies average 61 cows, and have a relatively

low rolling herd average of 15,430 lb annually. The UW Center for Dairy Profitability indicate that, on average, the pasture-based dairies in the dataset retained nearly 10% more of their revenue as profit (or net farm income from operations—NFIFO) than the average of traditional, confinement style dairy farms across a range of sizes<sup>10</sup>.

**Grazing Information and Education.** Included in 2012 were: Grazing Seminars at Dairy Expo: Feed costs: supplementation on pasture; automated milking systems (robotic milkers) for pasture systems; pasture irrigation & other drought strategies; roundtable discussion with Missouri and New Zealand grazing experts. Approximately 60 people participated in each session. The Department's Grazing Specialist provides presentations and workshops around the state. In 2012, eight presentations were made to a total of 545 participants.

DATCP's Grazing program provides support and advice to industry organizations including GrassWorks, Inc. and the Grazing Lands Conservation Initiative (GLCI) Steering Committee. GrassWorks is a non-profit, farmer led organization that sponsors the annual Wisconsin Grazing Conference. In partnership with NRCS, DATCP coordinates GLCI activities, including providing financial support and training of educators and technical assistance providers who work locally with farmers through a grant program, workshops and training.

**Grazing Mentor program.** Coordinating with GrassWorks, Inc., a listing of qualified grazing mentors has been created. Applicants to the Dairy 30x20 program can receive funding to compensate a mentor for his or her time for specific instruction and training.

<sup>9</sup> 2011 DATCP Dairy Grazing Survey: <http://datcp.wi.gov/uploads/Farms/pdf/2011DairyGrazingSummary.pdf>

<sup>10</sup> Kriegl, T. 2012. The Financial Performance of Dairy Systems across the U.S. <http://cdp.wisc.edu>

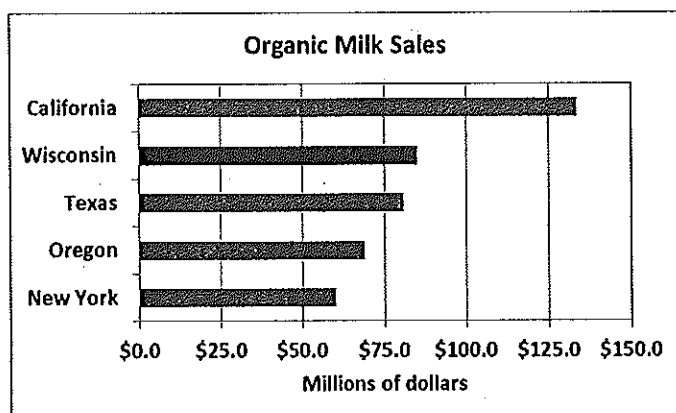
### Organic Dairy Production

The Department provides assistance to foster development of organic businesses, and increase availability of Wisconsin organic products in the marketplace, and to build capacity and expertise in organic production among Wisconsin farmers. Dairy farmers make up nearly half the organic farms in Wisconsin.

**Organic Dairy Production.** Wisconsin is first in the nation with 500 certified organic dairy farms and second in sales of organic milk<sup>11</sup>. Certified organic farms must maintain their livestock organically from the third trimester prior to birth. The animals must be fed purchased or home grown certified organic feed and animals must obtain no less than 30% of their feed intake from pasture during the growing season.

Organic dairies tend to be smaller than non-organic dairies and per-cow production averages are lower. In 2008, the average Wisconsin organic dairy milked 57 cows producing an average of 12,631 lb of milk annually. Lower production levels and higher feed costs are offset by higher milk prices. Organic milk sells for a significant premium, averaging \$26.20/cwt in 2008 and climbing to nearly \$30/cwt currently.

**Organic Advisory Council.** Organic dairy farmers and businesses such as Organic Valley are strong partners with the Department. The 12-member Council meets quarterly and provides a structure by which organic farmers and businesses have on-going communication with state and federal government agencies, technical colleges and the University of Wisconsin, for the purpose of improving utilization and effectiveness of these resources for organic farmers and businesses and supporting growth of the organic sector. The Council is administered by the Division of Agricultural Development.



**Invited presentations and workshops.** In 2012, Organic Agriculture Specialist gave four invited presentations on organic markets, organic pasture management and other topics to approximately 380 participants.

**Organic Certification Cost Share.** In 2012, 249 organic dairy farms averaged \$1,815 in certification fees and received an average of \$1,246 in DATCP administered cost-sharing from the National Organic Program. Fifteen dairy processors participated. Average certification costs

were \$2,474. Cost-sharing is provided at 75% up to \$750. Applicants all received \$750<sup>12</sup>.

<sup>11</sup> National Agricultural Statistics Service. 2008 Organic Production Survey. [http://www.agcensus.usda.gov/Publications/Organic\\_Production\\_Survey/](http://www.agcensus.usda.gov/Publications/Organic_Production_Survey/)

<sup>12</sup> DATCP Internal Organic Certification Cost-Share Program data.

## Dairy Processing in Wisconsin

**Dairy Processing Plants.** The state is home to more than 210 dairy processing plants including 145 cheese plants, and 65 other plants producing fluid milk, butter, cream cheese, cottage cheese, ice cream, yogurt and other products<sup>13</sup>. Wisconsin dairy plants are diverse in size as well, including 25 farmstead operations and several multinational corporations headquartered in the state. Wisconsin dairy plants process many types of milk, including cow, sheep, goat, and water buffalo, as well as milk specific to breed and management style.

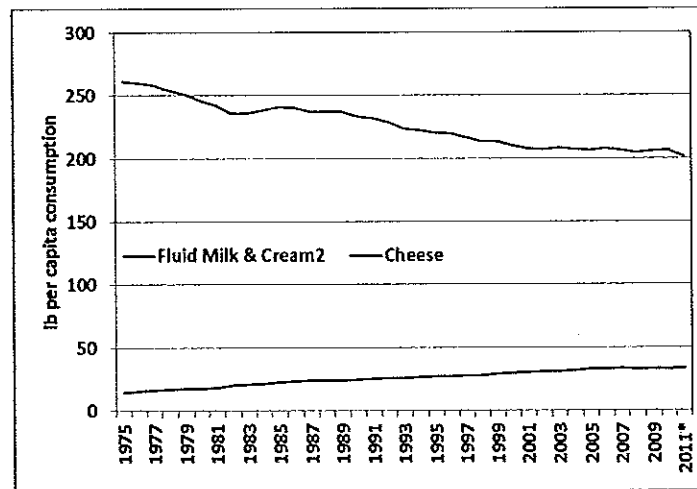
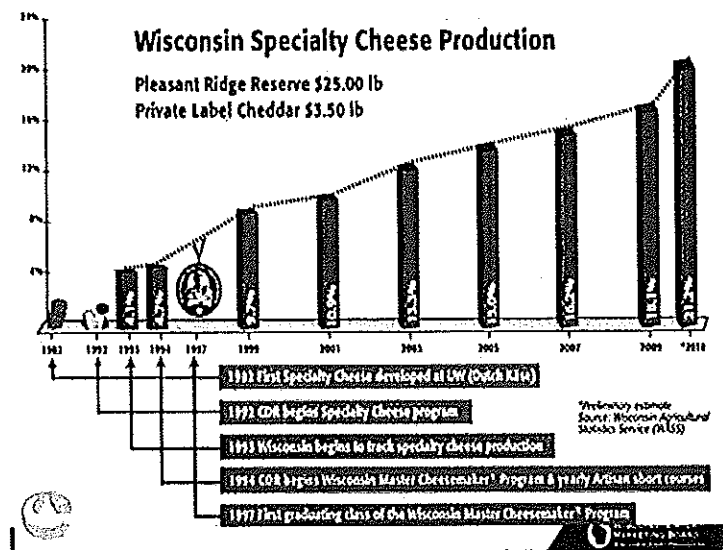
**Cheese.** Cheese continues to be the foundation of Wisconsin's processed dairy industry. It is estimated that 85% of the milk produced in Wisconsin is processed to make cheese. The state is currently home to 1,214 licensed cheese makers producing 10.9 billion pounds, representing 25% of total U.S. production. Among the products are 600 different types of cheese. Specialty cheeses now make up 22% of our cheese production<sup>14</sup>.

**Dairy Consumption.** Fluid milk consumption continues to decline. Consumption of other dairy products, especially cheese, has increased over the last quarter century, resulting in an overall 12% increase in dairy consumption since 1975. Today, the average American consumes more than 600 pounds of dairy products annually.

**Dairy Exports.** Foreign demand for Wisconsin dairy product continues to increase. In 2012, dairy exports totaled \$282 million, a 22% increase over 2011 according to the Global Trade Information Service (GTIS). Primary export markets for Wisconsin dairy products include Mexico, Canada, Japan, China, and Korea. Within this sector, cheese saw the greatest increase in export value compared to other dairy products. The state now ranks fourth nationwide for the value of dairy products, up from fifth in 2011.



## Future of Wisconsin Dairy Industry



<sup>13</sup> DATCP Licensed Dairy Plant list: [http://datcp.wi.gov/Food/Dairy\\_and\\_Meat\\_Directories/index.aspx](http://datcp.wi.gov/Food/Dairy_and_Meat_Directories/index.aspx).

<sup>14</sup> Wisconsin Milk Marketing Board. [http://media.eatwisconsincheese.com/ag\\_media/statistics.aspx](http://media.eatwisconsincheese.com/ag_media/statistics.aspx)

## ***Dairy Processing Services***

Dairy sector development involves a number of strategies and services. Goals include 1) stimulating innovation in dairy product production, 2) building interest and prompting investment in dairy plants, 3) improving efficiencies across the industry, and 4) working with other internal and external partners to ensure that milk production and farm profitability grow in tandem with a growing need for milk for processing.

Strategies used to achieve these goals include 1) gather, enlist and incorporate the resources of the Wisconsin dairy industry, 2) develop systems to deliver needed technical services to dairy farms, including farmer grant programs to employ specialists, profit and efficiency teams, and 3) develop programs to stimulate investment, including tax credits and job training programs.

**Networked Services.** Partners joining the effort include such major dairy organizations as the Wisconsin Milk Marketing Board (WMMB) and Wisconsin Cheese Makers Association (WCMA); educational systems, including the University of Wisconsin and the Wisconsin Center for Dairy Research (CDR); and state agencies including the Wisconsin Department of Agriculture, Trade and Consumer Protection and Wisconsin Economic Development Corporation (WEDC).

**Technical Assistance.** Dairy processing assistance focuses on individualized technical service, providing counseling and coaching, and referring clients to the resources they need. Included are workshops for dairy businesses. With greater customer expectations for traceability and food safety at the same time technology advances, frequently, technical assistance includes work directly with regulatory and licensing programs coordinating business development with regulatory permitting and licensing.

In 2012, Dairy Sector Development staff worked with 85 of Wisconsin's 210 dairy plants and fielded questions from more than 107 interested individuals and dairy organizations and companies providing technical assistance and coordinating referrals to partnering organizations.

**Something Special from Wisconsin.** A growing number of value added dairy companies are becoming members of SSfW™, including 28 cheese producers, distributors and retailers, four milk companies, five ice cream companies, and three yogurt/cottage cheese/butter companies.



### **International Trade Services for Dairy.**

Services provided by members of the International Trade Team are focused on educational programs and individual technical assistance to dairy companies including:

- Export seminar and webinars on topics pertaining to export documentation and free trade agreements.
- Client consultations provide market information and export documentation requirements. For example, register whey products in China. The documentation can differ from country to country.
- The Department is a member of the US Dairy Export Council and has organized presentations by their staff to the Wisconsin industry about the international opportunities and outlook for dairy products.
- Export marketing activities outside of the U.S. (Food Export Midwest). For example in 2010, the international marketing team in DAD promoted Wisconsin dairy products, primarily cheese, on Food Export trade missions to Japan and Korea. A list of interested buyers from both countries was made available to the industry at that time.



### ***Investment Tax Credits***



The Department administers a certification for companies that hold a valid license, for investments related to managing physical operations, construction, additions, upgrades to dairy, food processing and warehouse investments.

### **Dairy Manufacturing Facility Investment Credit**

<b>Tax-Year</b>	<b>Certificates</b>	<b>Investment</b>
• 2011 (co-ops)	1	\$4,604,606
• 2012 (Co-ops)	1	\$4,721,967
• 2011 (non co-ops)	50	\$79,333,931
• 2012 (non co-ops)	56	\$126,213,204

### *Value Added Dairy Revolving Loan Fund*

Through a partnership between the United States Department of Agriculture (USDA) Rural Development and the Department, the Value-Added Dairy Revolving Loan has funds available for dairy processors to purchase equipment to start or expand production.

The purpose for the Dairy Revolving Loan is to increase Wisconsin's value-added dairy production by building a partnership between the processor, their bank and our department. Loans can be used by a beginning processor or an established processor looking to expand, start a new product line or increase their product capacity through equipment purchases.

A business plan that demonstrates positive cash flow is required to apply. After a business plan is submitted, a short application will be provided for completion. The application will be evaluated through an internal and external review.

The loan may cover the cost of one or more pieces of equipment for a dairy processor. Examples of past equipment purchased by dairy processors through this program include: separators, specialty ice cream machines, pasteurizers, cheese cutting and sealing machines, brining equipment and coolers.

###

## *Example Business and Market Development Projects*

### **Dairy 30x20**

A Northeastern Wisconsin, 105 -cow dairy applied for, and was awarded a cost-share grant for a Dairy Profit Team in 2012.

Through the planning process, assisted by development staff, five problems were identified to be addressed through the Dairy Profit Team: A. Inconsistent forage quality, B. Breeding Issues (excess days open), C. Excess employee turnover, D. Employee performance issues, E. Insufficient milk production and components.

At the completion of the Profit Team process, the producer feels that most of these issues were able to be addressed by using the team and that he would have had a difficult time addressing them if it were not for that process.

Most notably, milk production has increased by 26% and components have both improved and stabilized. This change alone has significantly improved cash flow and allowed the farm to better weather the forage shortage of 2012-13.

In addition to improved production, the producer has observed that the cows are now healthier and are breeding back on time. He has reinstituted proper vaccination protocols and the change to consistent, timed breeding has caused him to work with that segment of the herd twice each week which has dramatically improved the consistency of cow management. This improved attention to the herd, in combination with improved recordkeeping, has provided improvements in herd health, open days, and milk premiums.

### **Dairy Exports**

A Cooperative in Northwestern Wisconsin started working with the Department, approximately about five years ago. Their goal was to learn more about the international marketplace and initiate contacts to begin exporting.

Through a combination of discussions with the business development staff and export specialists, the Cooperative has increased its exports of dry sweet whey, primarily to the Asian markets, each year since they began.

The company is quoted as attributing a portion of the growth to having aligned the production of dry sweet whey with the right people. They also note that they are planning for exports to be an important part of the company's future.



## ***Example Business and Market Development Projects***

### **Wisconsin Whey Study**

As the largest cheese producer in the nation, Wisconsin is also the largest whey producer. The whey production and processing sub-sector accounts for more than 16,300 jobs per year.

On a global level, demand for whey-based protein products remains strong with export growth averaging 7 percent a year, and prices hovering near a five-year high level.

A consortium of Wisconsin industry leaders, known as the Wisconsin Whey Opportunities Working Group, collaborated in 2012 to research the current volume and processing of cheese whey in Wisconsin, the many regional requirements for whey, and the return on investment for cheese makers considering whey handling and processing improvements.

Work included an in-depth survey of three-quarters of the State's 121 whey processors, personal interviews with 15 of the largest whey processing companies, and four specific return on investment models for cheese manufacturers considering processing whey.

The Wisconsin Whey Opportunities Working Group developed seven specific recommendations to further develop the economic opportunity presented by Wisconsin whey, and compiled a Whey Purchasers Directory to aid the industry.

### **Recommendations Include:**

- Create a long-term goal to eliminate land disposal of sale-able whey or other co-products.
- Increase technical knowledge through support for minimal processing of whey
- Engage with UW Center for Dairy Research for technical requirements that limit the utilization of whey and whey permeate for cooling, flavor, color, difficult handling characteristics, and options for conversion to fuel
- Collect annual statistics on production of raw whey, processed whey products and by-products
- Create best practices parameters for shipment of raw whey
- Encourage and facilitate partnerships between dairy companies and local authorities for the processing and treatment of whey or co-products for energy production
- Investigate whey market opportunities for value chain expansions regionally and in global markets

**Wisconsin Whey Study Report, available on line:**

**[http://datep.wi.gov/Farms/Dairy\\_Farming/whey/](http://datep.wi.gov/Farms/Dairy_Farming/whey/)**

## *Example Business and Market Development Projects*

Dairy Sector and Market development often involves more complex, multi-year projects. The following are examples:

### **Clock Shadow Creamery**

Clock Shadow Creamery began with an idea and a feasibility study developed with an existing dairy processor, Cedar Grove Cheese in Plain. The purpose was to establish the first cheese factory in downtown Milwaukee and one of the first urban cheese factories in the United States.

The need to be met was to provide consumers and food service establishments in Milwaukee with fresh and ethnic dairy products, teach environmentally responsible manufacturing, provide for training ethnic, specialty cheese makers, attracting investment and creating jobs.

The project was supported by technical assistance, grants, and loans from the Department as a combination of services through the **Buy Local, Buy Wisconsin** (DATCP grant for business creation), the **Dairy Business Innovation Center** (USDA grant for support of consulting services), the **Value Added Dairy Initiative** (USDA revolving loan fund) in conjunction with **business and market development services** within the Division of Agricultural Development.

In addition, facilities design, equipment and operational requirements were coordinated with the Department's Division of Food Safety.

The plant opened in late 2012, producing cheese curds, as well as Hispanic cheeses and quark using milk from farms adjacent to the metro area. It has become a hub for innovation and partnerships. \*\*

The project has reported new investment of more than \$800,000, \$200,000 in new sales during the first year, attracted 60 new customers, retaining two jobs and creating potential of six new jobs.

### **Clock Shadow Creamery Report :**

<http://datep.wi.gov/uploads/Business/pdf/09-10AnnualImpactReport.pdf>

- \*\* Purple Door Ice Cream and Martha's Pimento Cheese now use space in Clock Shadow's facility to craft dairy products. Both have used the Department's dairy and market development services during the planning of their business and startup and have successfully moved into growth phases of both businesses.

## ***Example Business and Market Development Projects***

### **Pasture-Grazed Dairy Market Development**

Specialized products that have unique characteristics, valued by consumer provide niche opportunities in the market and often have higher profit margin.

It is known that dairy products made from pasture milk are yellower in color, softer in texture, and have been described as having a more “complex” flavor and a stronger “dairy aroma” than conventional milk.

In 2008, DATCP received a U.S.D.A. North Central Region Sustainable Agriculture Research and Education (SARE) grant to explore pasture-based systems as a source of “specialty milk” for value-added dairy processing.

The overall goals of the project were to develop:

- a definitive understanding of the unique physical, chemical, and flavor qualities of grass-fed milk
- an ability to manage seasonal changes in pasture milk flavor and physical properties to improve processing quality
- a long-term, increased awareness among dairy processors of the opportunities and appropriate uses for pasture milk
- a long-term strategy for establishment of a premium market for pasture milk products

Three market assessment activities were conducted including interviews with dairy processors, retailers, and consumers in the region to assess the interest in a “specialty milk” for value added products and explored in-store marketing opportunities for grass-fed products; a focus group; and, a “discovery session” involving local food industry leaders in the Madison-Milwaukee-Chicago area.

The report summarizes the research and offers the following recommendations:

- Organize: pasture-based dairy farmers to facilitate pooling milk, marketing efforts, and branding of pasture-based products
- Generate funds: Develop a checkoff to generate funds for marketing
- Create a standard: Work together to create a standard that ensures integrity of the product
- Terminology: come to a consensus on what terms will be used to describe pasture milk.

**For a summary of findings and recommendations, see the full report titled:  
Growing the Pasture-Grazed Dairy Sector in Wisconsin, available on line at:**

**[http://datcp.wi.gov/Farms/Grazing/Grass\\_Fed\\_Market\\_Development/index.aspx](http://datcp.wi.gov/Farms/Grazing/Grass_Fed_Market_Development/index.aspx)**

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